

**Claims**

1. Nonreturn valve (5) between a first pressure side (26) and a second pressure side (27) having an external  
5 thread (11) which is formed on a first cylindrical portion (8) of a cylindrical valve housing (6) and can be screwed into a threaded bore (1) of a housing (2) of a hydraulic assembly,  
**characterised**  
10 in that a passage duct (39) for a hydraulic fluid flow is formed, between a side wall of the threaded bore (1) and a first region of material removal (16) of the lateral surface (10) of the cylindrical valve housing (6), in at least one angular segment ( $\alpha_1$ ,  $\alpha_2$ ,  $\alpha_3$  and  
15  $\alpha_4$ ) of the valve housing (6).
2. Nonreturn valve according to Claim 1,  
**characterised**  
in that the cylindrical valve housing (6) comprises  
20 two, three or four equal-sized first regions of material removal (16) formed at equidistant angular intervals on the lateral surface (10) of the cylindrical valve housing (6).
- 25 3. Nonreturn valve according to Claim 2,  
**characterised**  
in that the two, three or four equal-sized first regions of material removal (16) on the lateral  
surface (10) of the valve housing (6) are continued in  
30 a second cylindrical portion (9) adjoining the first cylindrical portion (8) provided with the external thread (11).

4. Nonreturn valve according to Claim 3,  
**characterised**

in that in the second cylindrical portion (9) the first regions of material removal (16) and  
5 correspondingly two, three or four further, second regions of material removal (17), which are equal in size to the first regions of material removal (16) and constructed in the angular segments ( $\alpha 5$ ,  $\alpha 6$ ,  $\alpha 7$  and  $\alpha 8$ ) of the valve housing (6) which are situated  
10 between the angular segments ( $\alpha 1$ ,  $\alpha 2$ ,  $\alpha 3$  and  $\alpha 4$ ) of the valve housing (6) which are provided with the first regions of material removal (16), are formed as engagements for a tool for screwing the nonreturn valve (5) into the threaded bore (1).

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5. Nonreturn valve according to Claim 4,  
**characterised**

in that the first and second regions of material removal (16, 17) constitute levelled regions and form  
20 a square, hexagonal or octagonal profile for a tool for screwing the nonreturn valve (5) into the threaded bore (1).

6. Nonreturn valve according to one of Claims 1 to 5,  
25 **characterised**

in that the threaded bore (1) merges, at the level of the end, facing towards the first pressure side (26), of the valve housing (6) screwed fully into the threaded bore (1), via a transition (4) into a  
30 continuation bore (3), the diameter of which is designed smaller than the diameter of the threaded bore (1).

7. Nonreturn valve according to Claim 6,  
**characterised**  
in that the transition (4) has a conical form.
- 5 8. Nonreturn valve according to Claim 6 or 7,  
**characterised**  
in that the hydraulic fluid flow between the valve  
housing (6) and the transition (4) between the  
threaded bore (1) and the continuation bore (3) is  
10 interrupted by the valve housing (6) pressing against  
the transition (4).
9. Nonreturn valve according to one of Claims 1 to 8,  
**characterised**  
15 in that the nonreturn valve (5) contains a valve seat  
(21) which is formed by a conical transition (40) from  
a first portion (19) of smaller inside diameter to a  
second portion (20) of larger inside diameter of a  
cutout (18) of the hollow-cylindrical nonreturn valve  
20 (5).
10. Nonreturn valve according to Claim 9,  
**characterised**  
in that the first portion (19) of the cutout (18)  
25 forms a first inflow opening (28) of the nonreturn  
valve (5).
11. Nonreturn valve according to Claim 10,  
**characterised**  
30 in that the nonreturn valve (5) has a second opening  
(31) at the end of the valve housing (6) opposite the  
first inflow opening (28).

12. Nonreturn valve according to Claim 11,  
**characterised**  
in that the second portion (20) of the cutout (18)  
contains a spherical valve body (22) which is pressed  
5 against the valve seat (21) by the spring force of a  
prestressed spring (25) likewise situated in the  
second portion (20) of the cutout (18) and the  
pressure difference between the pressure prevailing at  
the second opening (31) and the pressure prevailing at  
10 the first inflow opening (28).
13. Nonreturn valve according to one of Claims 9 to 12,  
**characterised**  
in that the hollow-cylindrical nonreturn valve (5) has  
15 in the second portion (20) of the cutout (18) a  
plurality of through-openings (38) which are  
distributed in equidistant angular segments ( $\beta$ ) on a  
circular line which is concentric with the  
longitudinal axis (37) of the nonreturn valve (5) and  
20 lies on the inner lateral surface of the valve housing  
(6), these through-openings opening into a region (39)  
of the second pressure side (27) of the threaded bore  
(1), which region is situated on the side of the first  
cylindrical portion (8) facing towards the first  
25 pressure side (26).
14. Nonreturn valve according to Claim 12,  
**characterised**  
in that the spring (25) is prestressed between a first  
30 and second spring plate (23, 24).
15. Nonreturn valve according to Claim 14,  
**characterised**

in that the first and second spring plate (23, 24) have the same geometry.

- 5 16. Nonreturn valve according to Claim 14 or 15,  
**characterised**  
in that the spring force of the prestressed spring (25) is transmitted to the valve body (22) via the first spring plate (23).
- 10 17. Nonreturn valve according to one of Claims 14 to 16,  
**characterised**  
in that the second spring plate (24) is supported against a snap ring (34) guided in an annular groove at the inner lateral surface of the hollow-cylindrical  
15 valve housing (6).
18. Nonreturn valve according to one of Claims 14 to 17,  
**characterised**  
in that the first and second spring plate (23, 24)  
20 each has an inner bore (32) for supplying the pressure prevailing at the second opening (31) to the valve body (22).